

FIG. 1A

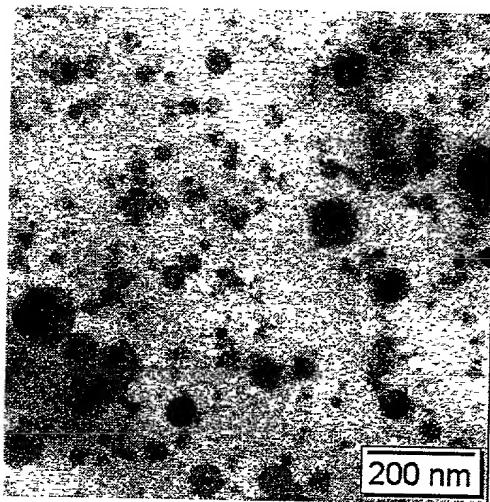


FIG. 1B

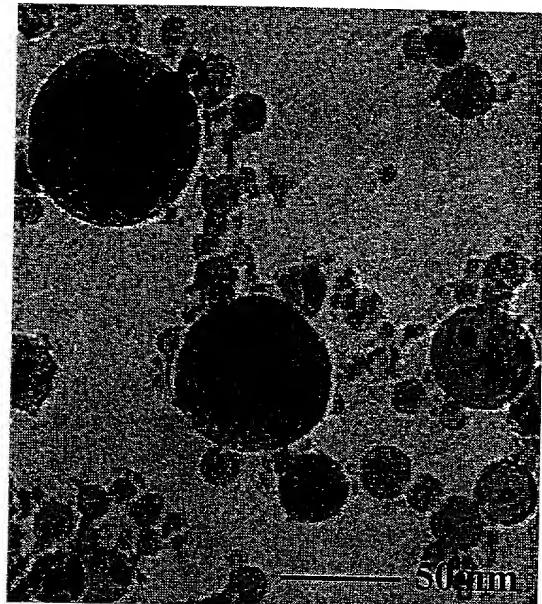


FIG. 2A

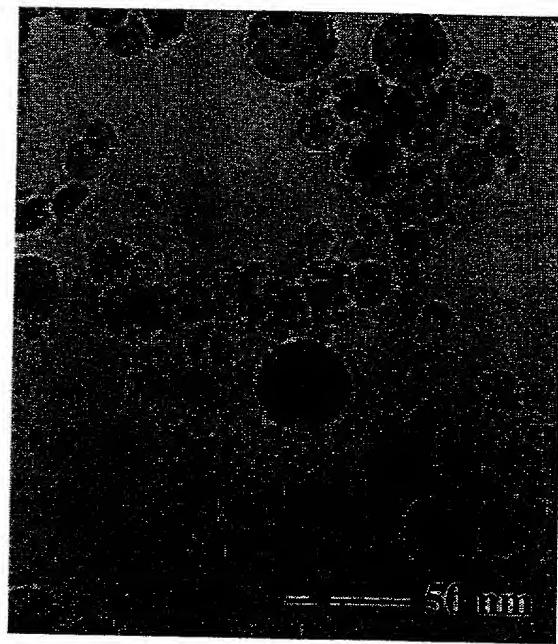


FIG. 2B

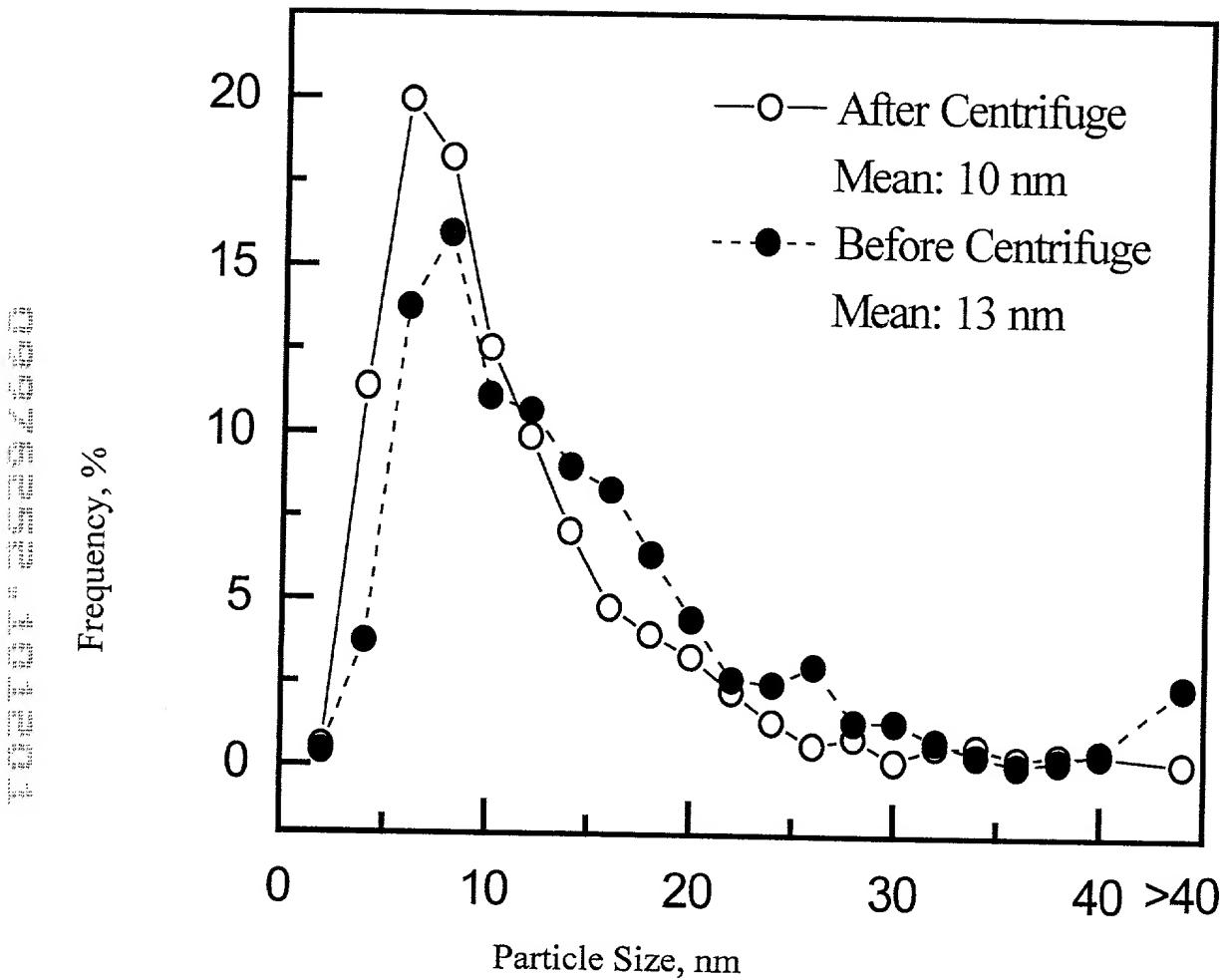


FIG. 2C

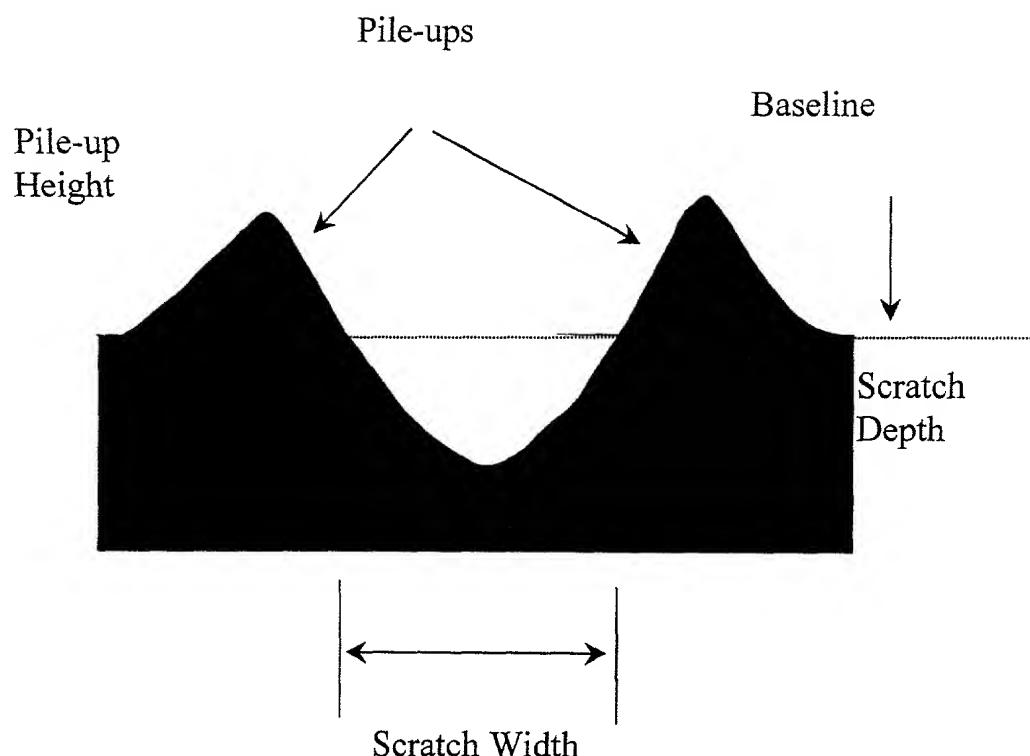


FIG. 3

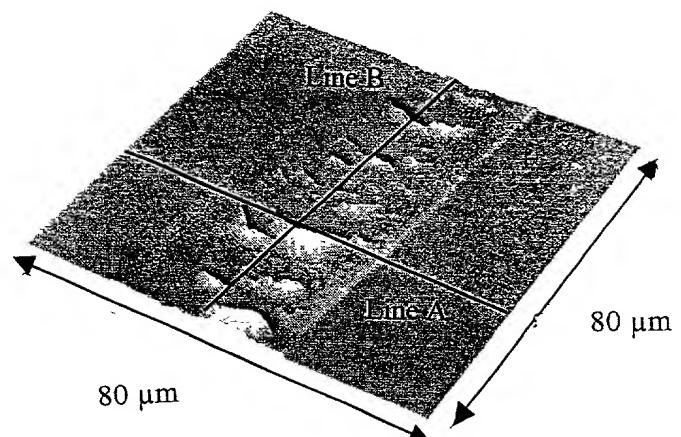
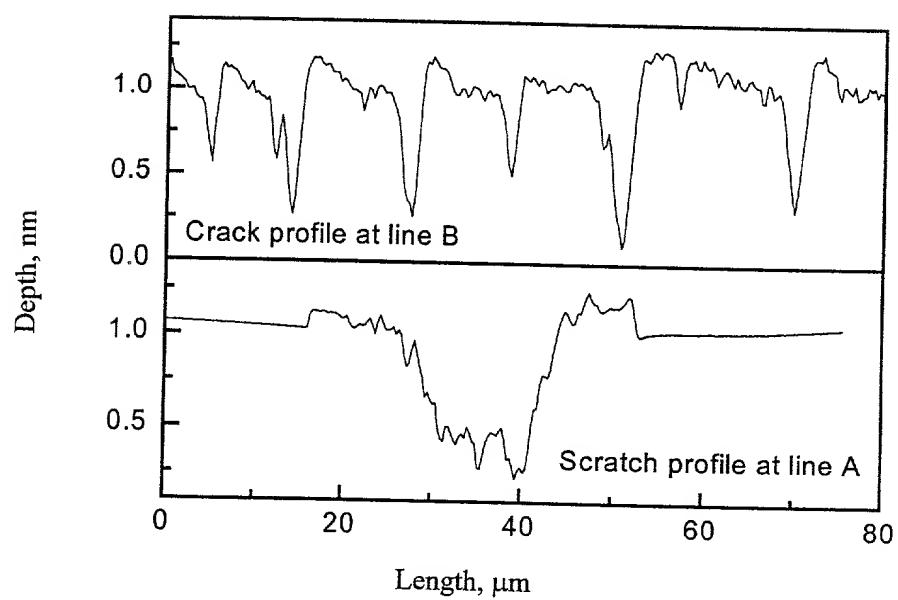


FIG. 4A



(a)

FIG. 4B

FIG. 4C

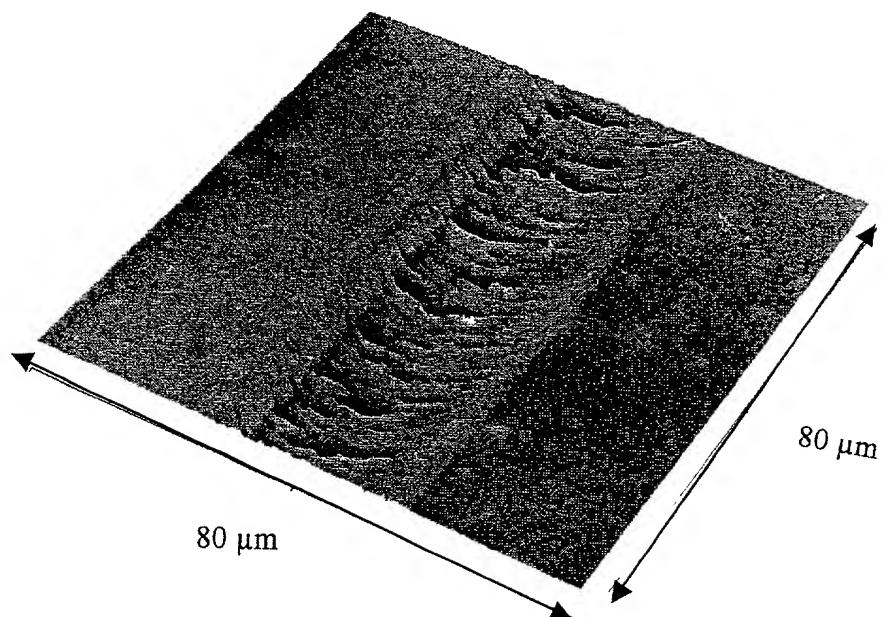
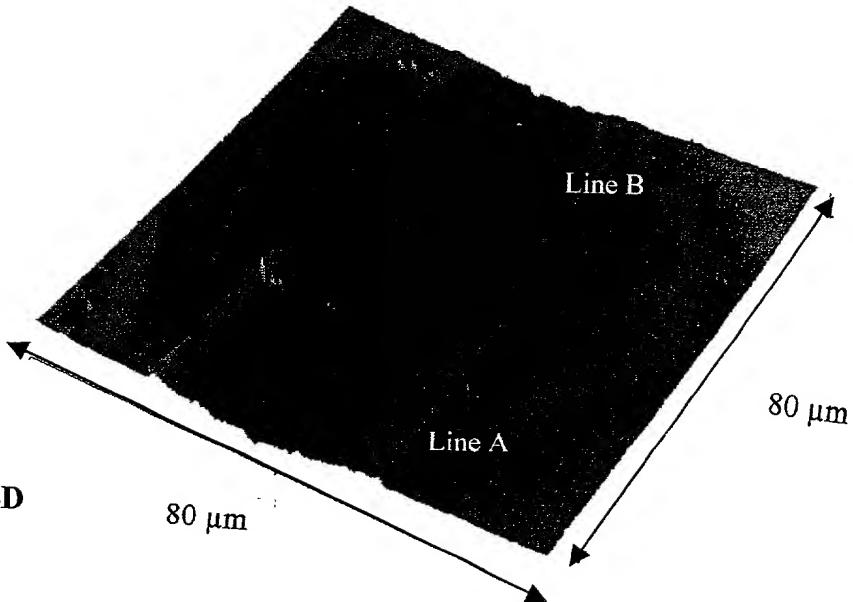


FIG. 4D



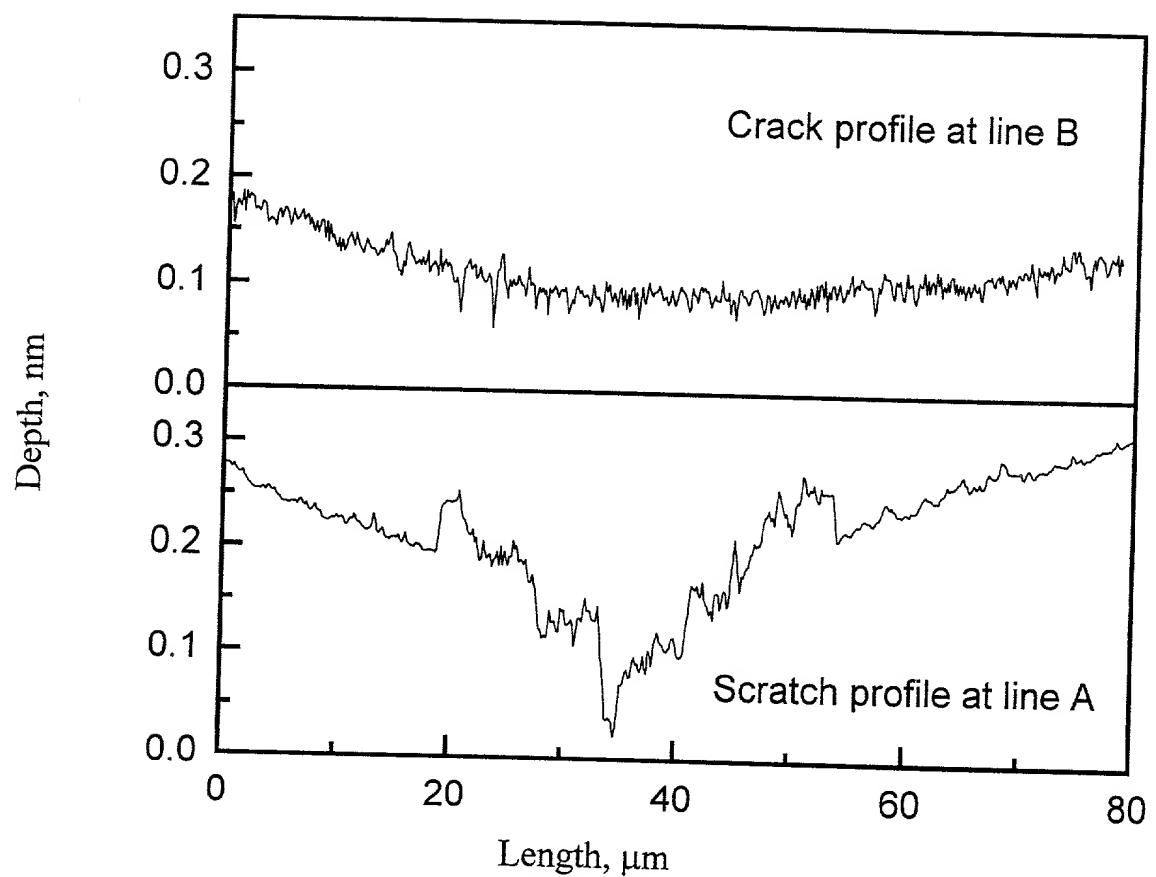


FIG. 4E

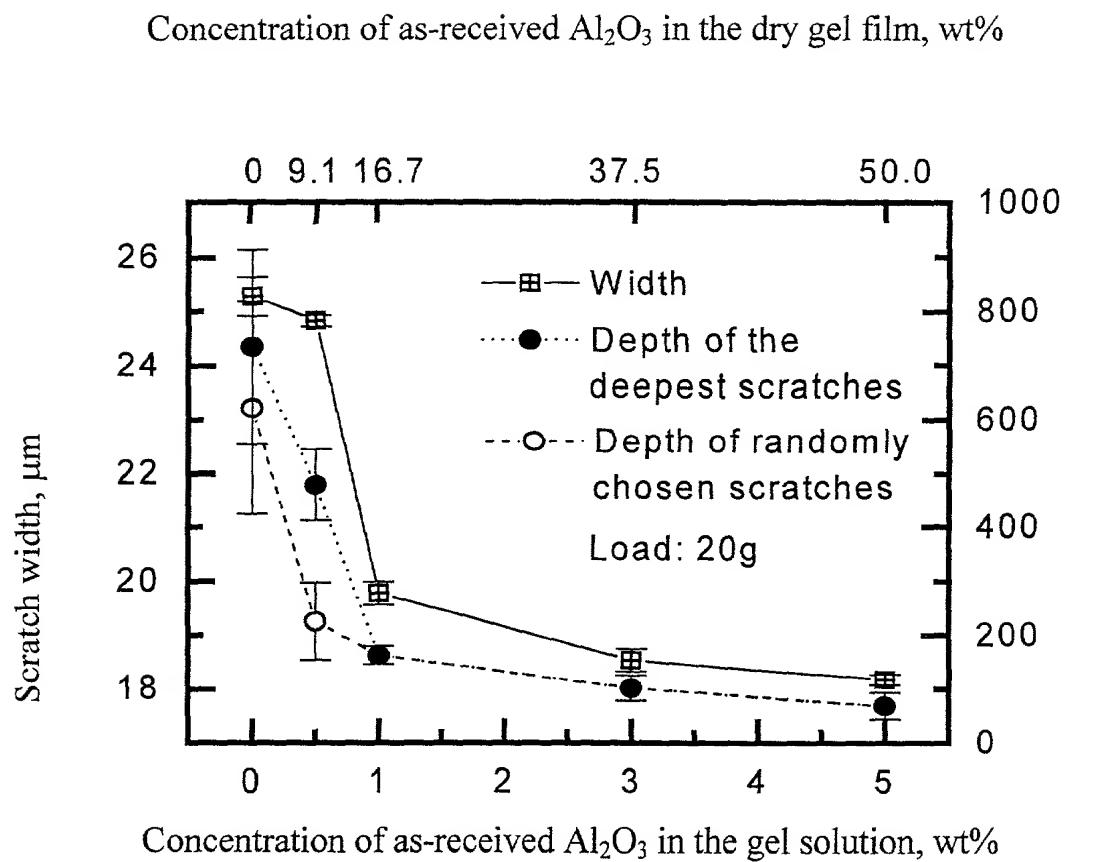


FIG. 5

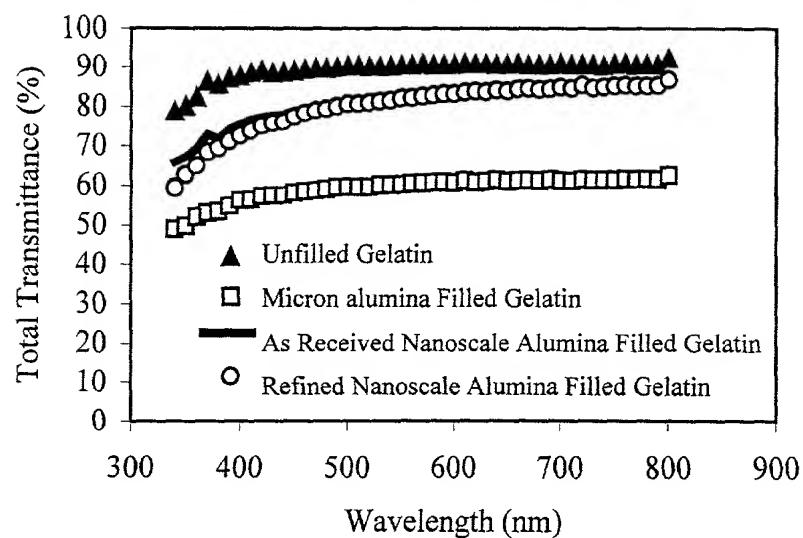


FIG. 6

Concentration of refined Al_2O_3 in the dry gel film, wt%

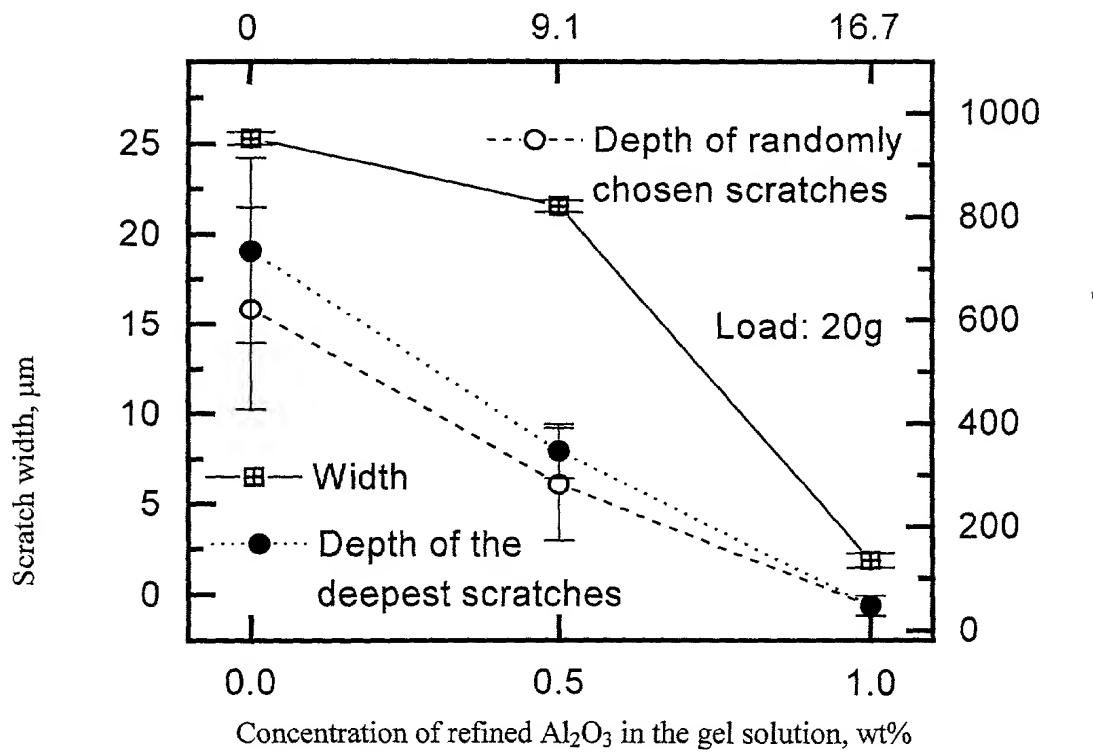


FIG. 7

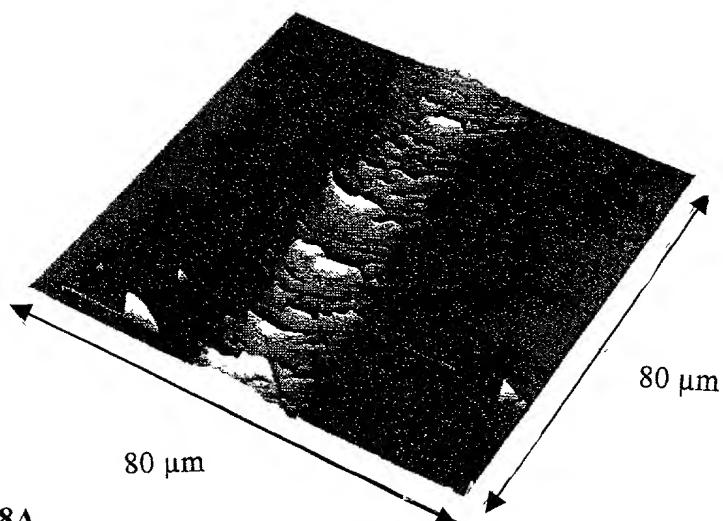


FIG. 8A

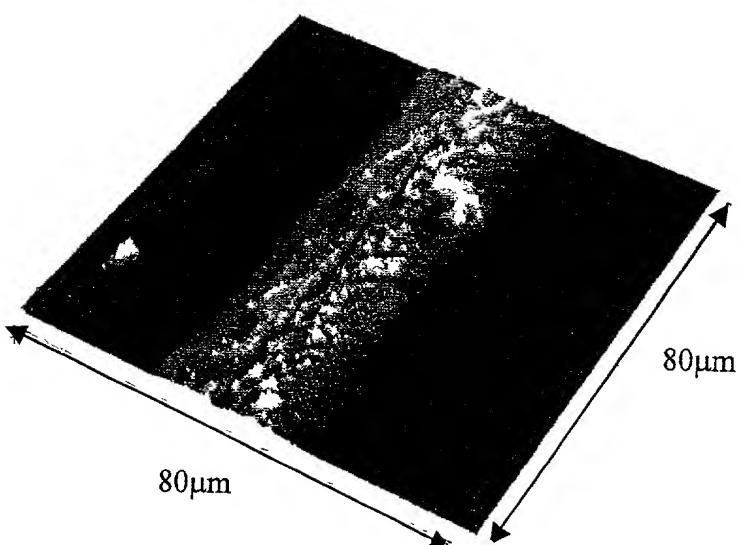


FIG. 8B

FIG. 9A

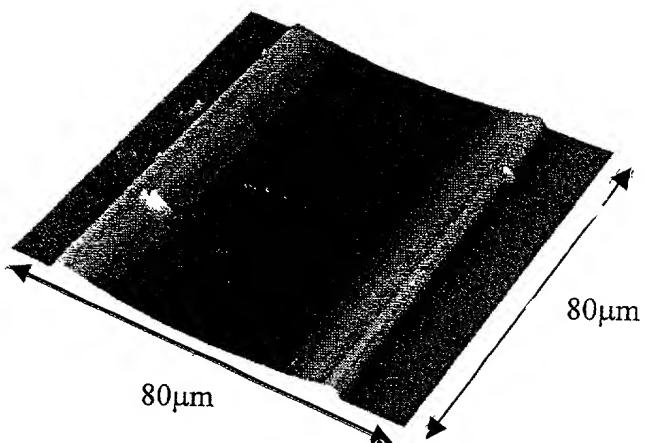


FIG. 9B

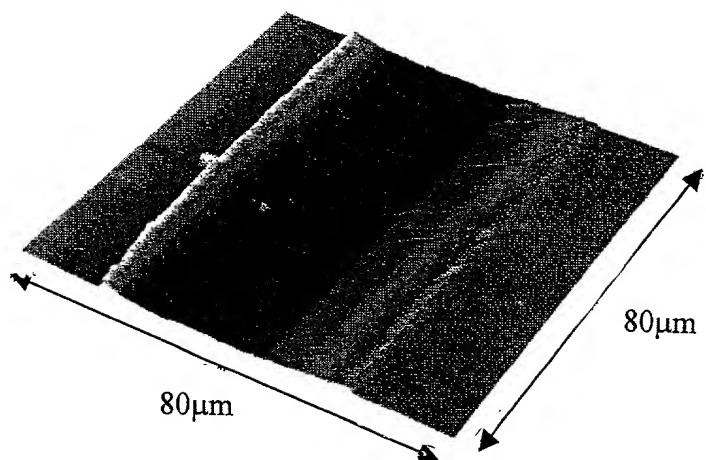
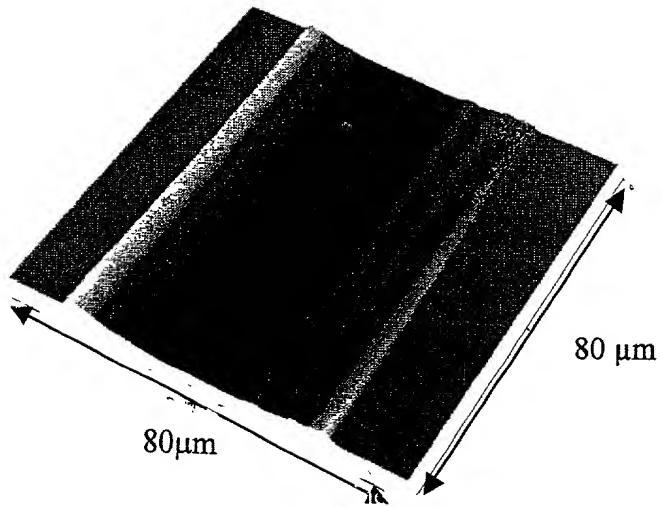


FIG. 9C



Concentration of as-received Al_2O_3 in the dry gel film, wt%

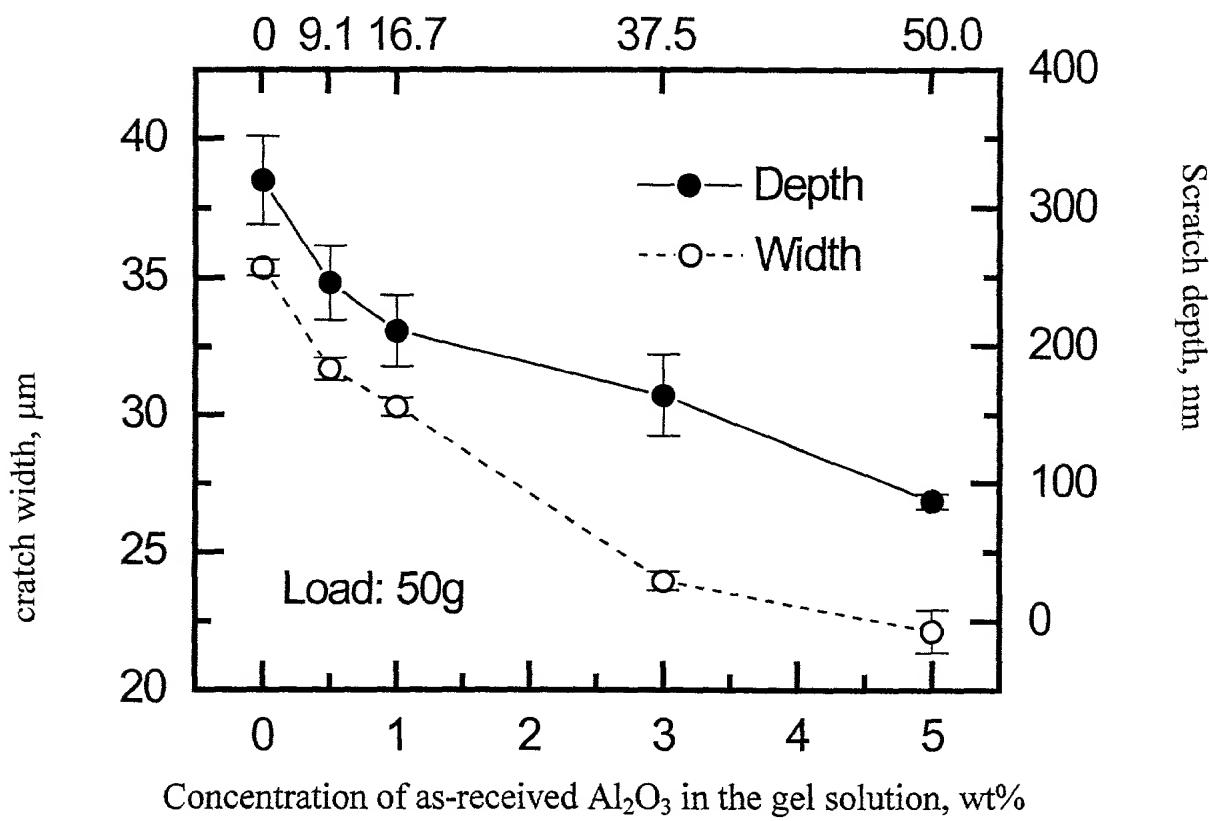


FIG. 10

Concentration of refined Al_2O_3 in the dry gel film, wt%

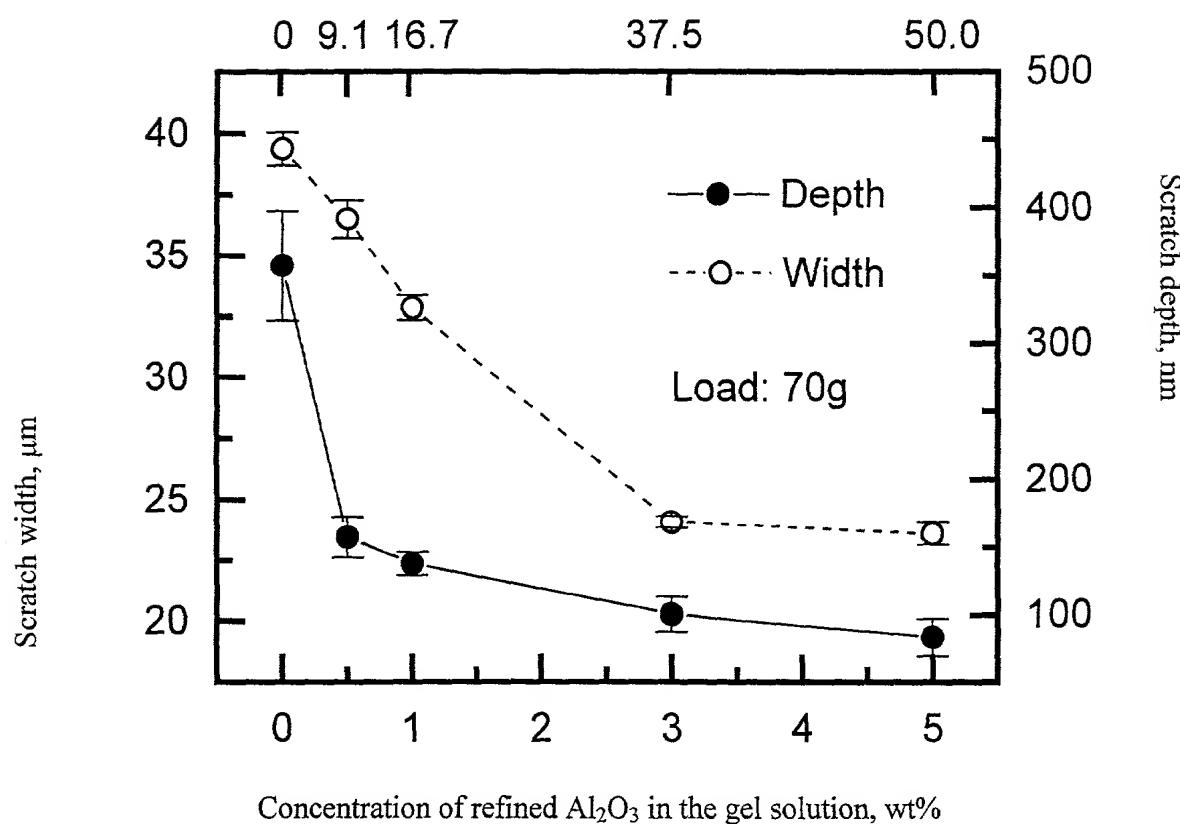


FIG. 11

Concentration of micron-size Al_2O_3 in the dry gel film, wt%

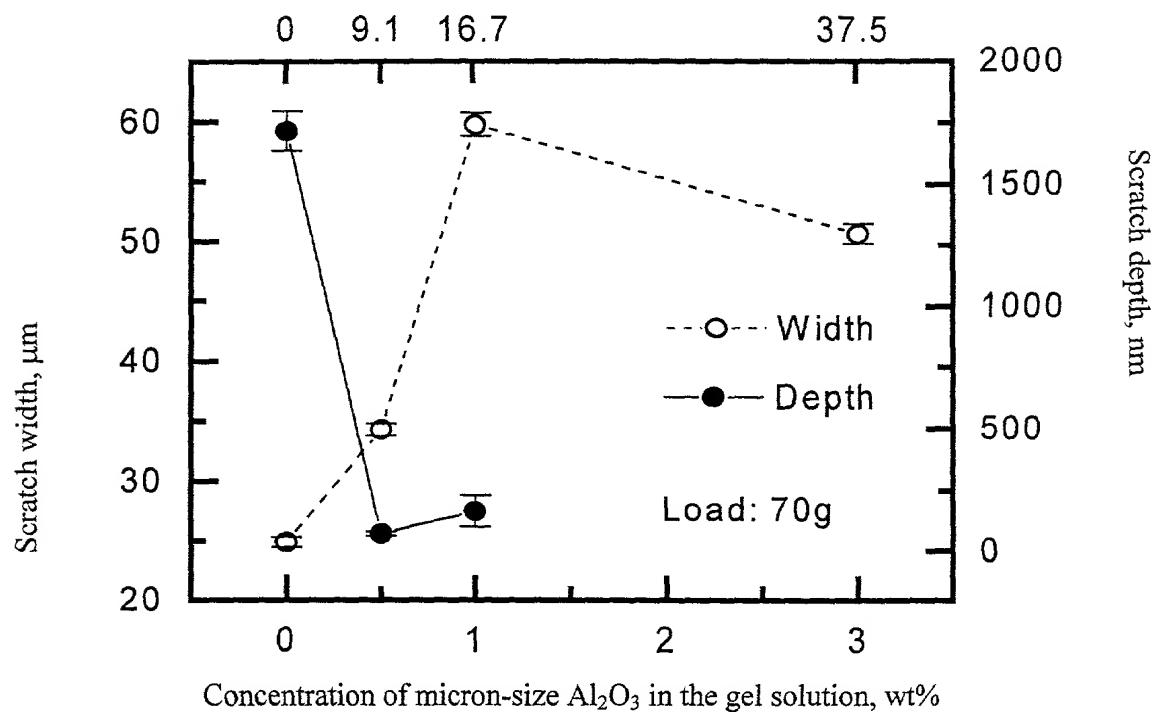


FIG. 12

FIG. 13A

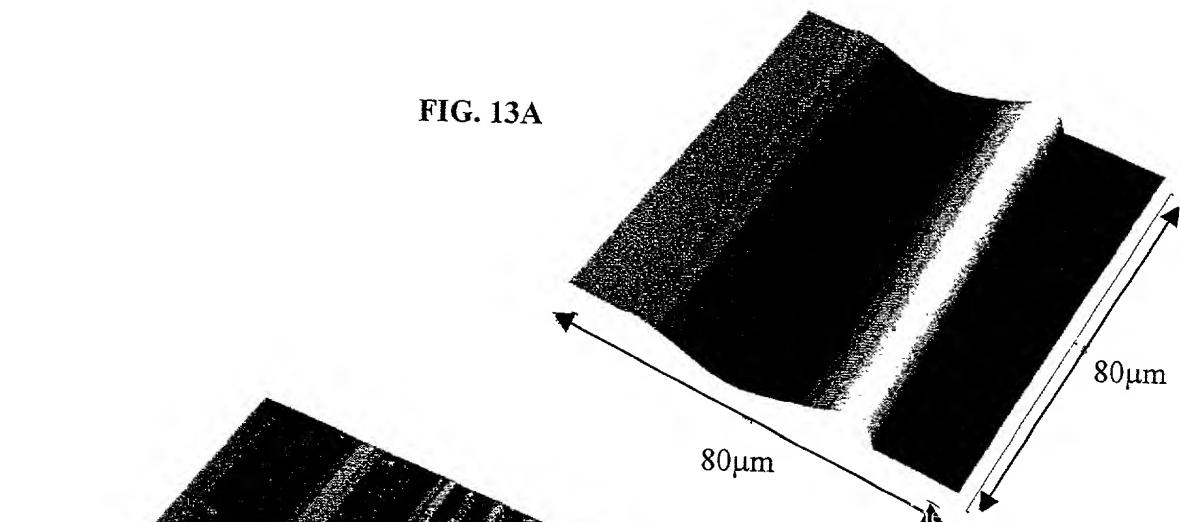


FIG. 13B

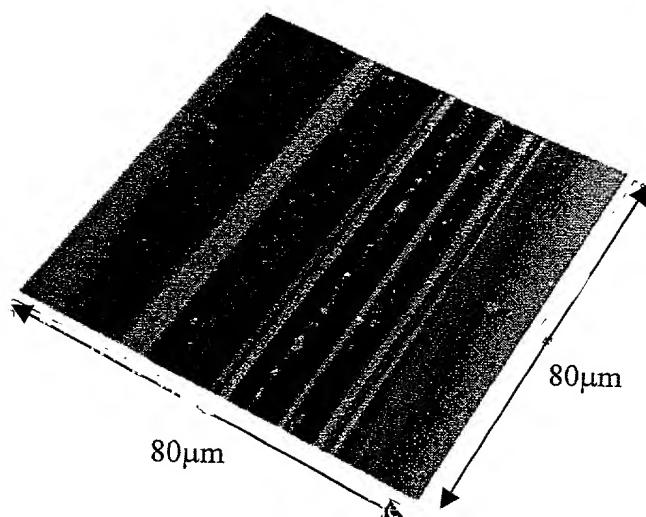


FIG. 13C

